



Figure 1

## Figure 2A

1 **MALTFALLVA LLVLSCKSSC SVGCDLPQTH SLGSRRTLML LAQMRKISLF SCLKDRHDFG**  
61 FPQEEFGNQF QKAETIPVLH EMIQQIFNLF STKDSSAAWD ETLLDKFYTE LYQQLNDLEA  
121 CVIQGVGVTE TPLMKEDSIL AVRKYFQRIT LYLKEKKYSP CAWEVVRAEI MRSFSLSTNL  
181 QESLRSKE

## Figure 2B

1 gagaacctgg agcctaaggt ttaggctcac ccatttcaac cagtctagca gcatctgcaa  
61 catctacaat ggccttgacc tttgctttac tgggtggccct cctgggtgctc agctgcaagt  
121 caagctgctc tgtgggctgt gatctgcctc aaaccacag cctgggtagc aggaggacct  
181 tgatgctcct ggcacagatg aggagaatct ctcttttctc ctgcttgaa gacagacatg  
241 actttggatt tccccaggag gagtttggca accagttcca aaaggctgaa accatccctg  
301 tcctccatga gatgatccag cagatcttca atctcttcag cacaaaggac tcatctgctg  
361 cttgggatga gaccctccta gacaaattct aactgaact ctaccagcag ctgaatgacc  
421 tggaagcctg tgtgatacag ggggtggggg tgacagagac tcccctgatg aaggaggact  
481 ccattctggc tgtgaggaaa tacttccaaa gaatcactct ctatctgaaa gagaagaaat  
541 acagcccttg tgctgggag gttgtcagag cagaaatcat gagatctttt tctttgtcaa  
601 caaacttgca agaaagttaa agaagtaagg aatgaaaact ggttcaacat ggaaatgatt  
661 ttcattgatt cgtatgccag ctacaccttt tatgatctgc catttcaaag actcatgttt  
721 ctgctatgac catgacacga tttaaatctt ttcaaagtgt tttaggagta ttaatcaaca  
781 ttgtattcag ctcttaaggc actagtccct tacagaggac catgctgact gatccattat  
841 ctattttaa attttttaaa tattatttat ttaactattt ataaaaaac ttatttttgt  
901 tcatattatg tcatgtgcac ctttgcacag tggttaatgt aataaaatgt gttctttgta  
961 tttggtaaat ttatttttgt ttgttcattg aacttttgct atggaacttt tgtacttggt  
1021 tattcttttaa aatgaaattc caagccta atgtgcaacct gattacagaa taactgggtac  
1081 acttcatttg tccatcaata ttatattcaa gatataagta aaaataaact ttctgtaaac  
1141 ca

### Figure 3A

1 MTNKCLLQIA LLLCFSTTAL SMSYNLLGFL QRSSNFQCQK LLWQLNGRLE YCLKDRMNF  
61 IP EEIKQLQQ FQKEDAALTI YEMLQNIFAI FRQDSSSTGW NETIVENLLA NVYHQINHLK  
121 TVLEEKLEKE DFTRGKLMSS LHLKRYYGRI LHYLKAKEYS HCAWTIVRVE ILRNFYFINR  
181 LTGYLRN

### Figure 3B

1 atgaccaaca agtgtctcct ccaaattgct ctcctgttgt gcttctccac tacagctctt  
61 tccatgagct acaacttgct tggattccta caaagaagca gcaatthttca gtgtcagaag  
121 ctccctgtggc aattgaatgg gaggcttgaa tattgcctca aggacaggat gaactttgac  
181 atccctgagg agattaagca gctgcagcag ttccagaagg aggacgccgc attgaccatc  
241 tatgagatgc tccagaacat ctttgctatt ttcagacaag attcatctag cactggctgg  
301 aatgagacta ttgttgagaa cctcctggct aatgtctatc atcagataaa ccatctgaag  
361 acagtcctgg aagaaaaact ggagaaagaa gattttacca ggggaaaact catgagcagt  
421 ctgcacctga aaagatatta tgggaggatt ctgcattacc tgaaggccaa ggagtacagt  
481 cactgtgcct ggaccatagt cagagtggaa atcctaagga acttttactt cattaacaga  
541 cttacagggtt acctccgaaa ctgaagatct cctagcctgt ccctctggga ctggacaatt  
601 gcttcaagca ttcttcaacc agcagatgct gtttaagtga ctgatggcta atgtactgca  
661 aatgaaagga cactagaaga ttttgaaatt tttattaaat tatgagttat ttttatttat  
721 ttaaatttta ttttgaaaaa taaattatth ttggtgc

## Figure 4A

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1  MKYTSYILAF QLCIVLGS LG CYCQDPYVKE AENLKKYFNA GHSDVADNGT LFLGILKNWK
61  EESDRKIMQS QIVSFYFKLF KNFKDDQSIQ KSVETIKEDM NVKFFNSNKK KRDDFEKLTN
121 YSVTDLNVQR KAIHELIQVM AELSPAAGTG KRKRSQMLFR GRRASQ
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## Figure 4B

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1  tgaagatcag ctattagaag agaaagatca gttaagtcct ttggacctga tcagcttgat
61  acaagaacta ctgatttcaa cttctttggc ttaattctct cggaacgat gaaatatata
121 agttatatct tggcttttca gctctgcac gttttgggtt ctcttggtg ttactgccag
181 gaccatata taaaagaagc agaaaacctt aagaaatatt ttaatgcagg tcattcagat
241 gtagcggata atggaactct tttcttaggc attttgaaga attggaaaga ggagagtgc
301 agaaaaataa tgcagagcca aattgtctcc ttttacttca aactttttaa aaactttaaa
361 gatgaccaga gcatccaaaa gagtgtggag accatcaagg aagacatgaa tgtcaagttt
421 ttcaatagca acaaaaagaa acgagatgac ttcgaaaagc tgactaatta ttcggtaact
481 gacttgaatg tccaacgcaa agcaatacat gaactcatcc aagtgatggc tgaactgtcg
541 ccagcagcta aaacagggaa gcgaaaaagg agtcagatgc tgtttcaagg tcgaagagca
601 tcccagtaat ggttgtcctg cctgcaatat ttgaatttta aatctaaatc tatttattaa
661 tatttaacat tatttatatg gggaatatat ttttagactc atcaatcaaa taagtattta
721 taatagcaac ttttgtgtaa tgaaaatgaa tatctattaa tatatgtatt atttataatt
781 cctatatcct gtgactgtct cacttaatcc tttgttttct gactaattag gcaaggctat
841 gtgattacaa ggctttatct caggggccaa ctaggcagcc aacctaagca agatcccatg
901 ggttgtgtgt ttatttcaat tgatgataca atgaacactt ataagtgaag tgatactatc
961 cagttactgc cggtttgaaa atatgcctgc aatctgagcc agtgctttaa tggcatgtca
1021 gacagaactt gaatgtgtca ggtgacctg atgaaaacat agcatctcag gagatttcat
1081 gcctgggtgt tccaaatatt gttgacaact gtgactgtac ccaaaggaa agtaactcat
1141 ttgttaaaat tatcaatata taatatatat gaataaagtg taagttcaca act
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